FIRST RECORD OF TAENARIS CATOPS TURDULA FRUHSTORFER, 1914 (LEPIDOPTERA: NYMPHALIDAE: AMATHUSIINAE) FROM DAUAN ISLAND, TORRES STRAIT, QUEENSLAND

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Abstract

Taenaris catops turdula Fruhstorfer, 1914 is recorded from Dauan Island, Torres Strait, Queensland. The single male specimen is the first record of this species from Dauan Island and the first male recorded from Australia. It also represents the fourth recorded Australian specimen with all specimens known only from Torres Strait, where the species is recorded from Erub (Darnley) (collected in 1910) and Saibai Islands (collected in 1996). Field observations of the butterfly are recorded and wing pattern elements that distinguish T. c. turdula from other Taenaris spp known from Torres Strait are presented.

Introduction

The genus *Taenaris* Hübner, 1819 contains approximately 25 species ranging from Malaysia through the Moluccas, New Guinea and several islands of the Torres Strait to the Solomon Islands (Parsons 1998, Braby 2000, Tennent 2002, Lambkin 2010). In Australia, the genus is represented by *T. artemis jamesi* Butler, 1877, *T. catops turdula* Fruhstorfer, 1914 and *T. myops kirschi* Staudinger, 1887 (Waterhouse and Lyell 1914, Braby 2000, Lambkin 2010, Braby 2016), predominantly from Torres Strait, with only *T. a. jamesi* recorded from mainland Australia (Johnson and Johnson 1991). Within Australia, *T. c. turdula* has been infrequently collected from Torres Strait and has been known only from three female specimens: two from Darnley Island, 13.v.1910 HE (AM) and 18.v.1910 HE (MV), and one from Saibai Island, 1.iii.1996, TAL (TLIKC) (Waterhouse and Lyell 1914, Braby 2000, Lambkin 2010). No males have been recorded previously from Australia.

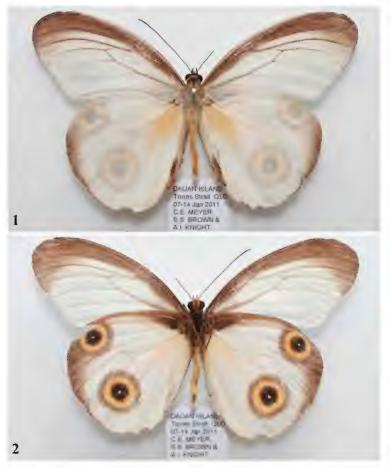
Abbreviations for specimen repositories: AM – Australian Museum, Sydney; CEMC – C.E. Meyer Collection, Brisbane; MV – Museum of Victoria, Melbourne; TLIKC – Joint collection of T.A. Lambkin and A.I. Knight, Brisbane.

Abbreviations for collectors: AIK – A.I. Knight, CEM – C.E. Meyer, HE – Hermann Elgner, SSB – S.S. Brown, TAL – T.A. Lambkin.

Field observations and discussion

On 14 January 2011, a male *T. c. turdula* (Figs 1-2) was collected by CEM (CEMC) from under mango trees (*Mangifera indica* L., Anacardiaceae) at 0800 h. A female *T. a. jamesi* was also collected from the same location shortly afterwards at 0805 h. Both butterflies were settled on low foliage in

the shaded understory below the mango trees and were only observed when they took flight following disturbance. Many rotting and fermenting mangoes were littered on the ground under the trees.



Figs 1-2. *Taenaris catops turdula*, male from Dauan Island, 07-14.i.2011, CEM, SSB & AIK [forewing 42 mm, wingspan 83 mm]: (1) upperside; (2) underside.

Males of *T. catops* (Westwood, 1851) can be distinguished from males of the other two species occurring in Australia by their squatter forewings, prominent dark scaling along the radial, medial and cubital veins on the forewing upperside and the forewing inner margin always lacking dark scaling (Parsons 1998). *Taenaris artemis* (Snellen van Vollenhoven, 1860)

(Figs 3-4) and *T. myops* (C. & R. Felder, 1860) lack the prominent dark scaling along the veins present in the upper part of the forewing of *T. catops* males. In addition, the other two species have broad but variable dark forewing inner margins (Parsons 1998). Waterhouse and Lyell (1914) noted that the tornal eye-spots on the underside of the hind wing of *T. catops* are more proximally situated than in *T. artemis*. Thus, the specimen from Dauan Island is placed within *T. c. turdula* and represents the first male record for Australia.



Figs 3-4. Taenaris artemis jamesi, male from Murray Island, 06-10.iv.2001, CEM & SSB [forewing 48 mm, wingspan 93 mm]: (3) upperside; (4) underside.

Parsons (1984) recorded *Cordyline terminalis* (L.) Kunth (Liliaceae) and *Phaius tancarvilliae* (Banks ex l'Her.) Blume (Orchidaceae) as host plants in Papua New Guinea. In addition, D'Abrera (1978) recorded *Musa* sp. (Musaceae), *Areca catechu* L. and *Caryota rumphiana* Mart. (both Arecaceae) as host plants. Species belonging to Arecaceae, Musaceae and Orchidaceae are recorded from Dauan Island (Torres Strait Regional Authority 2013).

Further collecting of *Taenaris* spp on the northern and eastern Torres Strait islands could assist in determining the residency status of *T. c. turdula* in Torres Strait.

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References

BRABY, M.F. 2000. Butterflies of Australia: their identification, biology and distribution. CSIRO Publishing, Melbourne; xxvii + 976 pp.

BRABY, M.F. 2016. *The complete field guide to butterflies of Australia*. 2nd Edition. CSIRO Publishing, Melbourne; xi + 384 pp.

D'ABRERA, B. 1978. *Butterflies of the Australian Region*. 2nd Revised Edition. Lansdowne Press, Melbourne; 415 pp.

JOHNSON, S.J. and JOHNSON, I.R. 1991. Notes on the life history of *Taenaris artemis* (Snellen van Vollenhoven) (Lepidoptera: Nymphalidae) in Australia and the rediscovery of *T. a. queenslandica* Rothschild. *Australian Entomological Magazine* **18**: 85-86.

LAMBKIN, T.A. 2010. A review of *Taenaris* Hübner (Lepidoptera: Nymphalidae: Amathusiinae) in Queensland, together with the first Australian records for *T. myops kirschi* Staudinger and *Elymnias agondas melanippe* Grose-Smith (Satyrinae). *Australian Entomologist* 37: 77-92.

PARSONS, M.J. 1984. Life histories of *Taenaris* (Nymphalidae) from Papua New Guinea. *Journal of the Lepidopterist's Society* **38**: 69-84.

PARSONS, M.J. 1998. The butterflies of Papua New Guinea: their systematics and biology. Academic Press, London; xvi + 736 pp, xxvi + 136 pls.

TORRES STRAIT REGIONAL AUTHORITY. 2013. Profile for management of the habitats and related ecological and cultural resource values of Dauan Island, January 2013. Prepared by 3D Environmental® for Torres Strait Regional Authority Land & Sea Management Unit; vi + pp 7-123.

WATERHOUSE, G.A. and LYELL, G. 1914. *The butterflies of Australia*. Angus and Robertson, Sydney; vi + 239 pp.